

APPENDIX A

Field Data

**March 2003 Annual Groundwater Monitoring
Field Data Report**

The Boeing Realty Corporation
Former C-6 Facility
Torrance, California

Prepared by:
Tait Environmental Management, Inc.

May 5, 2003



Tait Environmental Management, Inc.
Engineering • Environmental • Compliance

May 5, 2003

Ms. Stephanie M. Sibbett
Boeing Realty Corporation
3855 Lakewood Boulevard
Building 1A, MC D001-0097
Long Beach, CA 90846

Subject: Field Data Report for Annual Gauging and Sampling (March 2003) at the Boeing Realty Corporation, Former C-6 Facility, Torrance, California

Dear Ms. Sibbett:

This report is prepared to summarize and present the field data collected during the March 2003 Annual groundwater sampling and gauging activities conducted March 25-28, 2003 at the Boeing Realty Corporation (BRC), Former C-6 Facility, Torrance, California (Site). The groundwater gauging and sampling activities were performed in accordance with the following:

- *Groundwater Monitoring Work Plan 2003* by Haley & Aldrich, Inc., dated December 9, 2002 (File No. 28882-002).
- *Statement of Work for Evaluating of Natural Attenuation* by Exponent prepared for Ogden Environmental and Energy Services Co., dated January 10, 2001.
- *Standard Operating Procedures for Measuring Natural Attenuation Parameters* by England Geosystems and Haley & Aldrich, dated January 9, 2001.
- *Standard Operating Procedures, Groundwater Gauging and Sampling* by Tait Environmental Management, Inc., dated September 9, 2002.

The following is a brief summary of our field activities and observations:

- A total of 20 monitoring wells were gauged on March 25, 2003. Three (3) wells (WCC_4S, WCC_12S, and XMW_09) could not be gauged due to accessibility issues (See Groundwater Gauging Table, Appendix A).
- A total of 20 monitoring wells were purged and sampled between March 25-28, 2003. Three (3) of the 20 monitoring wells (TMW-6, TMW-11, & XMW-19) were purged and sampled for natural attenuation parameters.

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BOE-C6-0103871



- Three (3) wells could not be sampled due to accessibility issues. Monitoring well WCC_12S had been buried more than 4 feet below ground surface. Monitoring well WCC_4S was not sampled as the well was covered with trash/refuse and the entrance gate had been damaged and was in a closed position, not allowing access with the equipment. Monitoring well WCC_7S, which is located approximately 150 feet between WCC_12S and WCC_4S was sampled in order to obtain data for that area of the Site. Monitoring well XMW_09 is an off-site well not owned by BRC. This well was not sampled, as it had been paved over during previous construction activities in that area.
- A total of twenty (20) 55-gallon drums were filled with decontamination and purged groundwater and were labeled per the Haley & Aldrich IDW numbering scheme. The wells were left adjacent to each well and then later relocated to Lot 8.

Please call us if you have any questions or comments at (714) 560-8200. TEM is pleased to be of continued service to Boeing Realty Corporation.

Very Truly Yours,

Tait Environmental Management, Inc.

Scott Ek
Project Geologist

Attachments:

- Appendix A: Well Gauging Data Sheets & Groundwater Sampling Data Sheets
- Appendix B: Daily Field Reports
- Appendix C: Instrument Calibration Sheets, QA/QC Sample Identification Forms, and Investigation Derived Waste Inventory Records



March 2003 Annual Groundwater Monitoring Event
Groundwater Gauging Table

Boeing Realty Corporation
Former C-6 Facility
Torrance, California

| Well ID | Date | Time | Diameter | Measurement Point | Depth to Water | Total Depth | Comments |
|---------|------------|-------|----------|-------------------|----------------|-------------|--|
| BL-03 | 03/24/2003 | 9:13 | 2 | TOC-Notch | 70.35 | 80.93 | Good condition, tubing in well, soft bottom. |
| DAC-P1 | 03/24/2003 | 10:10 | 4 | TOC-Redmark | 65.58 | 90.50 | Good condition, tubing in well, soft bottom. |
| TMW-01 | 03/24/2003 | 10:40 | 2 | TOC-Blackmark | 69.84 | 84.61 | Good condition, soft bottom. |
| TMW-02 | 03/25/2003 | 10:35 | 2 | TOC-Bluemark | 69.79 | 85.05 | Very muddy bottom. |
| TMW-04 | 03/24/2003 | 8:46 | 2 | TOC-Bluemark | 66.27 | 80.23 | Good condition, tubing in well, semi-soft bottom. |
| TMW-05 | 03/24/2003 | 9:00 | 2 | TOC-Bluemark | 67.57 | 83.09 | Area surrounding well overgrown with shrubs, tubing in well, very soft bottom. |
| TMW-06 | 03/24/2003 | 8:53 | 2 | TOC-Bluemark | 70.67 | 85.80 | Tubing in well, good condition; soft bottom. |
| TMW-07 | 03/24/2003 | 10:20 | 2 | TOC-Blackmark | 66.24 | 83.59 | Good condition, soft bottom. |
| TMW-08 | 03/24/2003 | 10:25 | 2 | TOC-Blackmark | 67.69 | 82.53 | Good condition, soft bottom. |
| TMW-09 | 03/24/2003 | 10:44 | 2 | TOC-Blackmark | 66.56 | 80.19 | Above-ground well casing loose. Soft well bottom. |
| TMW-10 | 03/24/2003 | 9:22 | 2 | TOC-Blackmark | 61.52 | 77.90 | Well box flooded, both bolts missing. Soft bottom. |
| TMW-11 | 03/24/2003 | 8:55 | 2 | TOC-Blackmark | 61.97 | 78.00 | Good; Soft well bottom. |
| TMW-14 | 03/24/2003 | 9:55 | 2 | TOC-Blackmark | 72.61 | 87.70 | Monument casing, no well cap; soft well bottom. |



March 2003 Annual Groundwater Monitoring Event
Groundwater Gauging Table

Boeing Realty Corporation
Former C-6 Facility
Torrance, California

| Well ID | Date | Time | Diameter | Measurement Point | Depth to Water | Total Depth | Comments |
|---------|------------|-------|----------|-------------------|----------------|-------------|---|
| TMW-15 | 03/24/2003 | 10:02 | 2 | TOC-Blackmark | 68.90 | 87.26 | Monument casing, good condition; soft bottom. |
| WCC-12S | 03/25/2003 | --- | 4 | --- | --- | --- | Well not accessible. Wellhead is burried >4 feet below ground surface - Inaccessible. |
| WCC-3S | 03/25/2003 | 9:17 | 4 | TOC-Blackmark | 64.46 | 88.78 | Very muddy bottom. |
| WCC-4S | 03/24/2003 | --- | 4 | --- | --- | --- | Well not accessible. Wellhead is covered with heavy refuse/trash - Inaccessible. |
| WCC-5S | 03/24/2003 | 10:15 | 4 | TOC-Blackmark | 62.13 | 89.86 | Well overgrown with shrubery, soft bottom. |
| WCC-6S | 03/25/2003 | 10:25 | 4 | TOC-Blackmark | 64.58 | 88.14 | Very muddy bottom. |
| WCC-7S | 03/24/2003 | 9:24 | 4 | TOC-Blackmark | 63.72 | 90.34 | Good condition, soft bottom. |
| WCC-9S | 03/25/2003 | 10:15 | 4 | TOC-Blackmark | 60.51 | 88.15 | Very muddy bottom. |
| XMW-09 | 03/24/2003 | --- | 4 | --- | --- | --- | Well paved over during construction - Inaccessible. |
| XMW-19 | 03/24/2003 | NM | 4 | TOC-Blackmark | 60.87 | 77.33 | Good; Soft well bottom. |

NOTES:

--- = Not Measured or No Information Available.

Depth to Water and Total Depth are in feet below measurement point.

Diameter in inches.



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Groundwater Sampling Data Sheet

| | | | | | | | | | | | |
|--|------------------------------|---|-----------------------------|------------------------------------|---------------------------------------|--|-------------------------------|--|--------------------------------|--|---------------------|
| Project Name: BRC, Former C-6 Facility (March 2003) | | | | | | Date: 03/26/03 | | | | | |
| Project No.: EM-2303 | | | | | | Prepared By: NC/CC | | | | | |
| Well Identification: TMW_15 | | | | | | Pump Intake Depth (ft-bmp): ~78 | | | | | |
| Measurement Point Description: Top of Casing, Blackmark | | | | | | | | | | | |
| Depth to LNAPL (ft-bmp) | | Depth to Static Water Level (ft-bmp) | | Well Total Depth (ft-bmp) | | Water Column Height (ft) | | LNAPL Thickness (ft) | | One (1) Casing Volume (gallons) | |
| ND | | 68.91 | | 87.39 | | 18.48 | | ND | | 3 | |
| Well Diameter (in) | | | | Gallons/Foot | | | | Field Equipment: Horiba U-22, Solinst Water Level Meter | | | |
| | | | | 0.75 | 2 | 4 | 6 | Purge Method: 2-Inch Diameter Grundfos Pump with Dedicated Tubing | | | |
| 0.75 | 2 | 4 | 6 | 0.02 | 0.16 | 0.65 | 1.47 | Well Condition: | | | |
| Time | Casing Volumes Purged | Volume Purged (gallons) | Flow Rate (gpm) | Water Level (ft-bmp) | Ph | Temperature (°C) | Turbidity (NTU) | Conductivity (mS/cm) | Dissolved Oxygen (mg/L) | ORP (mV) | Observations |
| 11:06 | 0.5 | 1.5 | 0.4 | 74.11 | 7.11 | 23.77 | >990 | 0.91 | 5.75 | +16 | Very Silty |
| 11:08 | 1 | 3 | 0.75 | 74.25 | 7.15 | 23.82 | 800 | 0.95 | 5.31 | +19 | Silty |
| 11:10 | 1.5 | 4.5 | 0.75 | 74.00 | 7.16 | 24.06 | 540 | 1.10 | 4.63 | +24 | Slightly Silty |
| 11:13 | 2 | 6 | 0.5 | 73.71 | 7.18 | 24.17 | 470 | 1.20 | 4.39 | +17 | Slightly Silty |
| 11:16 | 2.5 | 7.5 | 0.5 | 73.53 | 7.20 | 24.24 | 300 | 1.23 | 4.33 | +6 | Clear |
| 11:19 | 3 | 9 | 0.5 | 73.30 | 7.22 | 24.32 | 48 | 1.17 | 4.34 | +7 | Clear |
| Purge Start Time | Purge End Time | Average Flow (gpm) | Total Gallons Purged | Total Casing Volumes Purged | 80% Recovery Water Level Depth | Water Level at Sampling Time (ft-bmp) | Sample Collection Time | Sample Identification | | | |
| 11:02 | 11:19 | 0.5 | 9 | 3 | 72.61 | 72.61 | 11:25 | TMW_15_WG032603_0001 | | | |
| Notes: | | | | | | | | | | | |

ft-bmp = feet below measuring point
LNAPL = light non-aqueous phase liquid



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Groundwater Sampling Data Sheet

| | | | | | | | | | | | | | |
|--|------------------------------|---|-----------------------------|------------------------------------|---------------------------------------|--|-------------------------------|--|--------------------------------|--|---------------------|---|--|
| Project Name: BRC, Former C-6 Facility (March 2003) | | | | | | Date: 03/26/03 | | | | | | | |
| Project No.: EM-2303 | | | | | | Prepared By: NC/CC | | | | | | | |
| Well Identification: TMW_14 | | | | | | Pump Intake Depth (ft-bmp): ~82 | | | | | | | |
| Measurement Point Description: Top of Casing, Blackmark | | | | | | | | | | | | | |
| Depth to LNAPL (ft-bmp) | | Depth to Static Water Level (ft-bmp) | | Well Total Depth (ft-bmp) | | Water Column Height (ft) | | LNAPL Thickness (ft) | | One (1) Casing Volume (gallons) | | Three (3) Casing Volumes (gallons) | |
| ND | | 72.56 | | 87.68 | | 15.12 | | ND | | 2.5 | | 7.5 | |
| Well Diameter (in) | | | | Gallons/Foot | | | | Field Equipment: Horiba U-22, Solinst Water Level Meter | | | | | |
| | | | | 0.75 | 2 | 4 | 6 | Purge Method: 2-Inch Diameter Grundfos Pump with Dedicated Tubing | | | | | |
| 0.75 | 2 | 4 | 6 | 0.02 | 0.16 | 0.65 | 1.47 | Well Condition: | | | | | |
| Time | Casing Volumes Purged | Volume Purged (gallons) | Flow Rate (gpm) | Water Level (ft-bmp) | Ph | Temperature (°C) | Turbidity (NTU) | Conductivity (mS/cm) | Dissolved Oxygen (mg/L) | ORP (mV) | Observations | | |
| 10:00 | 0.5 | 1.25 | 0.6 | 72.94 | 6.97 | 23.91 | 880 | 3.70 | 6.37 | +22 | Very Silty | | |
| 10:02 | 1 | 2.5 | 0.6 | 72.95 | 6.94 | 24.02 | 740 | 3.69 | 5.95 | +26 | Silty | | |
| 10:04 | 1.5 | 3.75 | 0.6 | 72.88 | 6.94 | 24.15 | 330 | 3.60 | 5.60 | +37 | Clear | | |
| 10:06 | 2 | 5 | 0.6 | 72.89 | 6.95 | 24.50 | 220 | 3.48 | 5.44 | +49 | Clear | | |
| 10:08 | 2.5 | 6.25 | 0.6 | 73.10 | 6.96 | 24.01 | 95 | 3.51 | 5.66 | +59 | Clear | | |
| 10:09 | 3 | 7.5 | 1.25 | 73.13 | 6.97 | 23.81 | 38 | 3.40 | 5.57 | +64 | Clear | | |
| Purge Start Time | Purge End Time | Average Flow (gpm) | Total Gallons Purged | Total Casing Volumes Purged | 80% Recovery Water Level Depth | Water Level at Sampling Time (ft-bmp) | Sample Collection Time | Sample Identification | | | | | |
| 9:58 | 10:09 | 0.68 | 7.5 | 3 | 75.58 | 73.13 | 10:12 | TMW_14_WG032603_0001 | | | | | |
| Notes: | | | | | | | | | | | | | |

ft-bmp = feet below measuring point
LNAPL = light non-aqueous phase liquid



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Groundwater Sampling Data Sheet

| | | | | | | | | | | | |
|--|------------------------------|---|-----------------------------|------------------------------------|---------------------------------------|--|-------------------------------|--|--------------------------------|--|---------------------|
| Project Name: BRC, Former C-6 Facility (March 2003) | | | | | | Date: 03/26/03 | | | | | |
| Project No.: EM-2303 | | | | | | Prepared By: NC/CC | | | | | |
| Well Identification: TMW_11 | | | | | | Pump Intake Depth (ft-bmp): ~72 | | | | | |
| Measurement Point Description: Top of Casing, Blackmark | | | | | | | | | | | |
| Depth to LNAPL (ft-bmp) | | Depth to Static Water Level (ft-bmp) | | Well Total Depth (ft-bmp) | | Water Column Height (ft) | | LNAPL Thickness (ft) | | One (1) Casing Volume (gallons) | |
| ND | | 61.91 | | 77.42 | | 15.51 | | ND | | 2.5 | |
| Well Diameter (in) | | | | Gallons/Foot | | | | Field Equipment: Horiba U-22, Solinst Water Level Meter | | | |
| | | | | 0.75 | 2 | 4 | 6 | Purge Method: 2-Inch Diameter Grundfos Pump with Dedicated Tubing | | | |
| 0.75 | 2 | 4 | 6 | 0.02 | 0.16 | 0.65 | 1.47 | Well Condition: Good Condition, Solid Bottom | | | |
| Time | Casing Volumes Purged | Volume Purged (gallons) | Flow Rate (gpm) | Water Level (ft-bmp) | Ph | Temperature (°C) | Turbidity (NTU) | Conductivity (mS/cm) | Dissolved Oxygen (mg/L) | ORP (mV) | Observations |
| 9:20 | 0.5 | 1.25 | 0.6 | 62.26 | 7.07 | 23.68 | >990 | 1.66 | 6.15 | +28 | Very Silty |
| 9:21 | 1 | 2.5 | 1.25 | 62.27 | 7.05 | 23.69 | 780 | 1.66 | 5.51 | +34 | Silty |
| 9:22 | 1.5 | 3.75 | 1.25 | 62.28 | 7.05 | 23.74 | 420 | 1.66 | 5.04 | +41 | Clear |
| 9:24 | 2 | 5 | 0.6 | 62.28 | 7.05 | 23.73 | 210 | 1.65 | 4.81 | +46 | Clear |
| 9:25 | 2.5 | 6.25 | 1.25 | 62.28 | 7.05 | 23.71 | 87 | 1.65 | 4.64 | +52 | Clear |
| 9:26 | 3 | 7.5 | 1.25 | 62.31 | 7.05 | 23.72 | 39 | 1.65 | 4.46 | +54 | Clear |
| Purge Start Time | Purge End Time | Average Flow (gpm) | Total Gallons Purged | Total Casing Volumes Purged | 80% Recovery Water Level Depth | Water Level at Sampling Time (ft-bmp) | Sample Collection Time | Sample Identification | | | |
| 9:18 | 9:26 | 0.9 | 7.5 | 3 | 65.01 | 62.31 | 9:30 | TMW_11_WG032603_0001 | | | |
| Notes: | | | | | | | | | | | |

ft-bmp = feet below measuring point
LNAPL = light non-aqueous phase liquid



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Groundwater Sampling Data Sheet

| | | | | | | | | | | | | | |
|--|------------------------------|---|-----------------------------|------------------------------------|---------------------------------------|--|-------------------------------|--|--------------------------------|--|---------------------|---|--|
| Project Name: BRC, Former C-6 Facility (March 2003) | | | | | | Date: 03/26/03 | | | | | | | |
| Project No.: EM-2303 | | | | | | Prepared By: NC/CC | | | | | | | |
| Well Identification: TMW_10 | | | | | | Pump Intake Depth (ft-bmp): ~71 | | | | | | | |
| Measurement Point Description: Top of Casing, Blackmark | | | | | | | | | | | | | |
| Depth to LNAPL (ft-bmp) | | Depth to Static Water Level (ft-bmp) | | Well Total Depth (ft-bmp) | | Water Column Height (ft) | | LNAPL Thickness (ft) | | One (1) Casing Volume (gallons) | | Three (3) Casing Volumes (gallons) | |
| ND | | 61.47 | | 78.95 | | 17.48 | | ND | | 3 | | 9 | |
| Well Diameter (in) | | | | Gallons/Foot | | | | Field Equipment: Horiba U-22, Solinst Water Level Meter | | | | | |
| | | | | 0.75 | 2 | 4 | 6 | Purge Method: 2-Inch Diameter Grundfos Pump with Dedicated Tubing | | | | | |
| 0.75 | 2 | 4 | 6 | 0.02 | 0.16 | 0.65 | 1.47 | Well Condition: Good Condition, Solid Bottom | | | | | |
| Time | Casing Volumes Purged | Volume Purged (gallons) | Flow Rate (gpm) | Water Level (ft-bmp) | Ph | Temperature (°C) | Turbidity (NTU) | Conductivity (mS/cm) | Dissolved Oxygen (mg/L) | ORP (mV) | Observations | | |
| 8:25 | 0.5 | 1.5 | 0.75 | 61.92 | 6.55 | 23.87 | 680 | 1.52 | 6.25 | +26 | Silty, No Odor | | |
| 8:27 | 1 | 3 | 0.75 | 61.93 | 6.74 | 23.59 | 340 | 1.54 | 5.62 | +33 | Mostly Clear | | |
| 8:29 | 1.5 | 4.5 | 0.75 | 61.97 | 6.86 | 23.53 | 160 | 1.55 | 5.41 | +42 | Clear | | |
| 8:31 | 2 | 6 | 0.75 | 61.97 | 6.95 | 23.66 | 82 | 1.56 | 5.38 | +48 | Clear | | |
| 8:32 | 2.5 | 7.5 | 1.5 | 61.97 | 7.03 | 23.55 | 46 | 1.57 | 5.36 | +61 | Clear | | |
| 8:34 | 3 | 9 | 0.75 | 61.98 | 7.08 | 23.54 | 22 | 1.57 | 5.34 | +66 | Clear | | |
| Purge Start Time | Purge End Time | Average Flow (gpm) | Total Gallons Purged | Total Casing Volumes Purged | 80% Recovery Water Level Depth | Water Level at Sampling Time (ft-bmp) | Sample Collection Time | Sample Identification | | | | | |
| 8:23 | 8:34 | 0.8 | 9 | 3 | 64.97 | 61.98 | 8:40 | TMW_10_WG032603_0001 | | | | | |
| Notes: | | | | | | | | | | | | | |

ft-bmp = feet below measuring point
LNAPL = light non-aqueous phase liquid



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Groundwater Sampling Data Sheet

| | | | | | | | | | | | | | |
|--|------------------------------|---|-----------------------------|------------------------------------|---------------------------------------|--|-------------------------------|--|--------------------------------|--|---------------------|---|--|
| Project Name: BRC, Former C-6 Facility (March 2003) | | | | | | Date: 03/25/03 | | | | | | | |
| Project No.: EM-2303 | | | | | | Prepared By: NC/CC | | | | | | | |
| Well Identification: WCC_6S | | | | | | Pump Intake Depth (ft-bmp): ~75 | | | | | | | |
| Measurement Point Description: Top of Casing, Blackmark | | | | | | | | | | | | | |
| Depth to LNAPL (ft-bmp) | | Depth to Static Water Level (ft-bmp) | | Well Total Depth (ft-bmp) | | Water Column Height (ft) | | LNAPL Thickness (ft) | | One (1) Casing Volume (gallons) | | Three (3) Casing Volumes (gallons) | |
| ND | | 64.88 | | 88.00 | | 23.12 | | ND | | 15 | | 45 | |
| Well Diameter (in) | | | | Gallons/Foot | | | | Field Equipment: Horiba U-22, Solinst Water Level Meter | | | | | |
| | | | | 0.75 | 2 | 4 | 6 | Purge Method: 2-Inch Diameter Grundfos Pump with Dedicated Tubing | | | | | |
| 0.75 | 2 | 4 | 6 | 0.02 | 0.16 | 0.65 | 1.47 | Well Condition: | | | | | |
| Time | Casing Volumes Purged | Volume Purged (gallons) | Flow Rate (gpm) | Water Level (ft-bmp) | Ph | Temperature (°C) | Turbidity (NTU) | Conductivity (mS/cm) | Dissolved Oxygen (mg/L) | ORP (mV) | Observations | | |
| 13:04 | 0.5 | 7.5 | 0.9 | 66.37 | 7.07 | 23.49 | 163 | 1.05 | 3.46 | -181 | Cloudy, No Odor | | |
| 13:12 | 1 | 15 | 1.0 | 66.58 | 7.08 | 23.44 | 120 | 1.24 | 3.43 | -200 | Slightly Cloudy | | |
| 13:19 | 1.5 | 22.5 | 1.1 | 66.58 | 7.06 | 23.40 | 89 | 1.48 | 3.45 | -204 | Clear | | |
| 13:27 | 2 | 30 | 0.9 | 66.58 | 7.07 | 23.43 | 75 | 1.59 | 3.31 | -207 | Clear | | |
| 13:34 | 2.5 | 37.5 | 1.1 | 66.58 | 7.06 | 23.43 | 54 | 1.66 | 3.23 | -208 | Clear | | |
| 13:41 | 3 | 45 | 1.1 | 66.58 | 7.06 | 23.44 | 48 | 1.71 | 3.16 | -208 | Clear | | |
| Purge Start Time | Purge End Time | Average Flow (gpm) | Total Gallons Purged | Total Casing Volumes Purged | 80% Recovery Water Level Depth | Water Level at Sampling Time (ft-bmp) | Sample Collection Time | Sample Identification | | | | | |
| 12:54 | 13:41 | 0.96 | 45 | 3 | 69.50 | 66.58 | 13:45 | WCC_6S_WG032503_0001 | | | | | |
| Notes: | | | | | | | | | | | | | |

ft-bmp = feet below measuring point
LNAPL = light non-aqueous phase liquid



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Groundwater Sampling Data Sheet

| | | | | | | | | | | | | | |
|--|------------------------------|---|-----------------------------|------------------------------------|---------------------------------------|--|-------------------------------|--|--------------------------------|--|---------------------|---|--|
| Project Name: BRC, Former C-6 Facility (March 2003) | | | | | | Date: 03/25/03 | | | | | | | |
| Project No.: EM-2303 | | | | | | Prepared By: NC/CC | | | | | | | |
| Well Identification: WCC_5S | | | | | | Pump Intake Depth (ft-bmp): ~77 | | | | | | | |
| Measurement Point Description: Top of Casing, Blackmark | | | | | | | | | | | | | |
| Depth to LNAPL (ft-bmp) | | Depth to Static Water Level (ft-bmp) | | Well Total Depth (ft-bmp) | | Water Column Height (ft) | | LNAPL Thickness (ft) | | One (1) Casing Volume (gallons) | | Three (3) Casing Volumes (gallons) | |
| ND | | 62.18 | | 89.89 | | 27.71 | | ND | | 18 | | 54 | |
| Well Diameter (in) | | | | Gallons/Foot | | | | Field Equipment: Horiba U-22, Solinst Water Level Meter | | | | | |
| | | | | 0.75 | 2 | 4 | 6 | Purge Method: 2-Inch Diameter Grundfos Pump with Dedicated Tubing | | | | | |
| 0.75 | 2 | 4 | 6 | 0.02 | 0.16 | 0.65 | 1.47 | Well Condition: | | | | | |
| Time | Casing Volumes Purged | Volume Purged (gallons) | Flow Rate (gpm) | Water Level (ft-bmp) | Ph | Temperature (°C) | Turbidity (NTU) | Conductivity (mS/cm) | Dissolved Oxygen (mg/L) | ORP (mV) | Observations | | |
| 11:09 | 0.5 | 9 | 1.5 | 62.99 | 7.32 | 23.12 | 8 | 0.99 | 3.73 | -25 | Clear, No Odor | | |
| 11:13 | 1 | 18 | 2.25 | 62.99 | 7.29 | 23.11 | 5 | 1.00 | 4.42 | -6 | Clear, No Odor | | |
| 11:18 | 1.5 | 27 | 1.8 | 62.98 | 7.29 | 23.16 | 4 | 1.16 | 4.02 | +17 | Clear, No Odor | | |
| 11:23 | 2 | 36 | 1.5 | 62.99 | 7.32 | 23.09 | 4 | 1.13 | 3.80 | +28 | Clear, No Odor | | |
| 11:27 | 2.5 | 45 | 2.25 | 63.00 | 7.34 | 23.09 | 4 | 1.13 | 3.73 | +35 | Clear, No Odor | | |
| 11:31 | 3 | 54 | 2.25 | 63.00 | 7.35 | 23.09 | 4 | 1.13 | 3.65 | +38 | Clear, No Odor | | |
| Purge Start Time | Purge End Time | Average Flow (gpm) | Total Gallons Purged | Total Casing Volumes Purged | 80% Recovery Water Level Depth | Water Level at Sampling Time (ft-bmp) | Sample Collection Time | Sample Identification | | | | | |
| 11:03 | 11:31 | 1.9 | 54 | 3 | 67.72 | 63.00 | 11:35 | WCC_5S_WG032503_0001 | | | | | |
| Notes: | | | | | | | | | | | | | |

ft-bmp = feet below measuring point
 LNAPL = light non-aqueous phase liquid



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Groundwater Sampling Data Sheet

| | | | | | | | | | | | |
|--|------------------------------|---|-----------------------------|------------------------------------|---------------------------------------|--|--|--|--------------------------------|--|---------------------|
| Project Name: BRC, Former C-6 Facility (March 2003) | | | | | | | Date: 03/26/03 | | | | |
| Project No.: EM-2303 | | | | | | | Prepared By: NC/CC | | | | |
| Well Identification: WCC_9S | | | | | | | Pump Intake Depth (ft-bmp): ~71 | | | | |
| Measurement Point Description: Top of Casing, Blackmark | | | | | | | | | | | |
| Depth to LNAPL (ft-bmp) | | Depth to Static Water Level (ft-bmp) | | Well Total Depth (ft-bmp) | | Water Column Height (ft) | | LNAPL Thickness (ft) | | One (1) Casing Volume (gallons) | |
| ND | | 60.41 | | 88.30 | | 27.89 | | ND | | 18 | |
| Well Diameter (in) | | | | Gallons/Foot | | | | Field Equipment: Horiba U-22, Solinst Water Level Meter | | | |
| | | | | 0.75 | 2 | 4 | 6 | Purge Method: 2-Inch Diameter Grundfos Pump with Dedicated Tubing | | | |
| 0.75 | 2 | 4 | 6 | 0.02 | 0.16 | 0.65 | 1.47 | Well Condition: Good Condition, Solid Bottom | | | |
| Time | Casing Volumes Purged | Volume Purged (gallons) | Flow Rate (gpm) | Water Level (ft-bmp) | Ph | Temperature (°C) | Turbidity (NTU) | Conductivity (mS/cm) | Dissolved Oxygen (mg/L) | ORP (mV) | Observations |
| 12:02 | 0.5 | 9 | 1.8 | 61.68 | 7.17 | 23.13 | 45 | 0.765 | 3.02 | +14 | Clear |
| 12:06 | 1 | 18 | 2.3 | 61.73 | 7.20 | 23.09 | 48 | 1.37 | 4.47 | +17 | Clear |
| 12:10 | 1.5 | 27 | 2.3 | 61.73 | 7.26 | 23.11 | 36 | 1.43 | 4.21 | +18 | Clear |
| 12:14 | 2 | 36 | 2.3 | 61.71 | 7.25 | 23.09 | 23 | 1.49 | 4.15 | +20 | Clear |
| 12:18 | 2.5 | 45 | 2.3 | 61.71 | 7.27 | 23.10 | 10 | 1.53 | 4.14 | +17 | Clear |
| 12:22 | 3 | 54 | 2.3 | 61.67 | 7.29 | 23.13 | 10 | 1.58 | 4.15 | +15 | Clear |
| Purge Start Time | Purge End Time | Average Flow (gpm) | Total Gallons Purged | Total Casing Volumes Purged | 80% Recovery Water Level Depth | Water Level at Sampling Time (ft-bmp) | Sample Collection Time | Sample Identification | | | |
| 11:57 | 12:22 | 2.2 | 54 | 3 | 65.99 | 61.67 | 12:25 | WCC_9S_WG032603_0001 | | | |
| Notes: | | | | | | | | | | | |

ft-bmp = feet below measuring point
LNAPL = light non-aqueous phase liquid



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Groundwater Sampling Data Sheet

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|---|------------------------------|---|-----------------------------|------------------------------------|---------------------------------------|--|--|--|--------------------------------|--|---------------------|---|--|
| Project Name: BRC, Former C-6 Facility (March 2003) | | | | | | | Date: 03/26/03 | | | | | | |
| Project No.: EM-2303 | | | | | | | Prepared By: NC/CC | | | | | | |
| Well Identification: TMW_6 | | | | | | | Pump Intake Depth (ft-bmp): ~80 | | | | | | |
| Measurement Point Description: Top of Casing, Bluemark | | | | | | | | | | | | | |
| Depth to LNAPL (ft-bmp) | | Depth to Static Water Level (ft-bmp) | | Well Total Depth (ft-bmp) | | Water Column Height (ft) | | LNAPL Thickness (ft) | | One (1) Casing Volume (gallons) | | Three (3) Casing Volumes (gallons) | |
| ND | | 70.56 | | 85.77 | | 15.21 | | ND | | 2.5 | | 7.5 | |
| Well Diameter (in) | | | | Gallons/Foot | | | | Field Equipment: Horiba U-22, Solinst Level Meter | | | | | |
| | | | | 0.75 | 2 | 4 | 6 | Purge Method: 2-Inch Diameter Grundfos Pump with Dedicated Tubing | | | | | |
| 0.75 | 2 | 4 | 6 | 0.02 | 0.16 | 0.65 | 1.47 | Well Condition: | | | | | |
| Time | Casing Volumes Purged | Volume Purged (gallons) | Flow Rate (gpm) | Water Level (ft-bmp) | Ph | Temperature (°C) | Turbidity (NTU) | Conductivity (mS/cm) | Dissolved Oxygen (mg/L) | ORP (mV) | Observations | | |
| 13:43 | 0.5 | 1.25 | 0.4 | 70.67 | 7.37 | 22.87 | 770 | 1.59 | 8.24 | +106 | Silty | | |
| 13:45 | 1 | 2.5 | 0.6 | 70.69 | 7.33 | 22.75 | 610 | 1.60 | 7.57 | +95 | Slightly Silty | | |
| 13:47 | 1.5 | 3.75 | 0.6 | 70.73 | 7.36 | 22.56 | 430 | 1.60 | 6.85 | +115 | Clearing | | |
| 13:48 | 2 | 5 | 1.25 | 70.73 | 7.35 | 22.66 | 160 | 1.60 | 6.65 | +119 | Clear | | |
| 13:50 | 2.5 | 6.25 | 0.6 | 70.72 | 7.37 | 23.10 | 38 | 1.59 | 6.09 | +117 | Clear | | |
| 13:52 | 3 | 7.5 | 0.6 | 70.72 | 7.42 | 22.84 | 22 | 1.61 | 6.07 | +120 | Clear | | |
| Purge Start Time | Purge End Time | Average Flow (gpm) | Total Gallons Purged | Total Casing Volumes Purged | 80% Recovery Water Level Depth | Water Level at Sampling Time (ft-bmp) | Sample Collection Time | Sample Identification | | | | | |
| 13:40 | 13:52 | 0.6 | 7.5 | 3 | 73.60 | 70.72 | 13:55 | TMW_6_WG032603_0001 | | | | | |
| Notes: | | | | | | | | | | | | | |

ft-bmp = feet below measuring point
LNAPL = light non-aqueous phase liquid



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Groundwater Sampling Data Sheet

| | | | | | | | | | | | |
|--|------------------------------|---|-----------------------------|------------------------------------|---------------------------------------|--|-------------------------------|--|--------------------------------|--|---------------------|
| Project Name: BRC, Former C-6 Facility (March 2003) | | | | | | Date: 03/26/03 | | | | | |
| Project No.: EM-2303 | | | | | | Prepared By: NC/CC | | | | | |
| Well Identification: TMW_9 | | | | | | Pump Intake Depth (ft-bmp): ~76 | | | | | |
| Measurement Point Description: Top of Casing, Blackmark | | | | | | | | | | | |
| Depth to LNAPL (ft-bmp) | | Depth to Static Water Level (ft-bmp) | | Well Total Depth (ft-bmp) | | Water Column Height (ft) | | LNAPL Thickness (ft) | | One (1) Casing Volume (gallons) | |
| ND | | 66.36 | | 80.83 | | 13.72 | | ND | | 2.5 | |
| Well Diameter (in) | | | | Gallons/Foot | | | | Field Equipment: Horiba U-22, Solinst Level Meter | | | |
| | | | | 0.75 | 2 | 4 | 6 | Purge Method: 2-Inch Diameter Grundfos Pump with Dedicated Tubing | | | |
| 0.75 | 2 | 4 | 6 | 0.02 | 0.16 | 0.65 | 1.47 | Well Condition: | | | |
| Time | Casing Volumes Purged | Volume Purged (gallons) | Flow Rate (gpm) | Water Level (ft-bmp) | Ph | Temperature (°C) | Turbidity (NTU) | Conductivity (mS/cm) | Dissolved Oxygen (mg/L) | ORP (mV) | Observations |
| 14:31 | 0.5 | 1.25 | 1.25 | 67.31 | 7.56 | 23.05 | 620 | 1.51 | 8.49 | +155 | Silty |
| 14:33 | 1 | 2.5 | 0.6 | 67.17 | 7.53 | 22.99 | 390 | 1.51 | 7.71 | +146 | Slightly Silty |
| 14:34 | 1.5 | 3.75 | 1.25 | 67.12 | 7.48 | 23.15 | 220 | 1.51 | 6.49 | +132 | Slightly Silty |
| 14:36 | 2 | 5 | 0.6 | 67.04 | 7.47 | 23.17 | 140 | 1.52 | 6.01 | +134 | Clear |
| 14:37 | 2.5 | 6.25 | 1.25 | 66.97 | 7.46 | 23.51 | 64 | 1.52 | 5.70 | +127 | Clear |
| 14:39 | 3 | 7.5 | 0.6 | 66.91 | 7.45 | 23.64 | 42 | 1.52 | 5.66 | +124 | Clear |
| Purge Start Time | Purge End Time | Average Flow (gpm) | Total Gallons Purged | Total Casing Volumes Purged | 80% Recovery Water Level Depth | Water Level at Sampling Time (ft-bmp) | Sample Collection Time | Sample Identification | | | |
| 14:30 | 14:39 | 0.8 | 7.5 | 3 | 69.05 | 66.91 | 14:42 | TMW_9_WG032603_0001 | | | |
| Notes: | | | | | | | | | | | |

ft-bmp = feet below measuring point
LNAPL = light non-aqueous phase liquid



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Groundwater Sampling Data Sheet

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|--|------------------------------|---|-----------------------------|------------------------------------|---------------------------------------|--|-------------------------------|--|--------------------------------|--|---------------------|---|--|
| Project Name: BRC, Former C-6 Facility (March 2003) | | | | | | Date: 03/27/03 | | | | | | | |
| Project No.: EM-2303 | | | | | | Prepared By: CC/SM | | | | | | | |
| Well Identification: BL_3 | | | | | | Pump Intake Depth (ft-bmp): ~74 | | | | | | | |
| Measurement Point Description: Top of Casing, Notch | | | | | | | | | | | | | |
| Depth to LNAPL (ft-bmp) | | Depth to Static Water Level (ft-bmp) | | Well Total Depth (ft-bmp) | | Water Column Height (ft) | | LNAPL Thickness (ft) | | One (1) Casing Volume (gallons) | | Three (3) Casing Volumes (gallons) | |
| ND | | 70.28 | | 80.94 | | 10.66 | | ND | | 1.71 | | 5.10 | |
| Well Diameter (in) | | | | Gallons/Foot | | | | Field Equipment: Horiba U-22, Solinst Water Level Meter | | | | | |
| | | | | 0.75 | 2 | 4 | 6 | Purge Method: 2-Inch Diameter Grundfos Pump with Dedicated Tubing | | | | | |
| 0.75 | 2 | 4 | 6 | 0.02 | 0.16 | 0.65 | 1.47 | Well Condition: Good Condition, Solid Bottom | | | | | |
| Time | Casing Volumes Purged | Volume Purged (gallons) | Flow Rate (gpm) | Water Level (ft-bmp) | Ph | Temperature (°C) | Turbidity (NTU) | Conductivity (mS/cm) | Dissolved Oxygen (mg/L) | ORP (mV) | Observations | | |
| 9:39 | 0.5 | 1 | 0.5 | 70.56 | 6.80 | 22.18 | 190 | 3.09 | 8.37 | +63 | Clear | | |
| 9:41 | 1 | 2 | 1 | 70.48 | 6.53 | 22.40 | 140 | 2.85 | 7.62 | +59 | Clear | | |
| 9:42 | 1.5 | 3 | 1 | 70.48 | 6.40 | 22.76 | 90 | 2.83 | 7.44 | +74 | Clear | | |
| 9:43 | 2 | 4 | 1 | 70.47 | 6.42 | 23.23 | 65 | 2.81 | 7.40 | +78 | Clear | | |
| 9:45 | 2.5 | 5 | 0.5 | 70.47 | 6.38 | 23.20 | 55 | 2.80 | 7.35 | +81 | Clear | | |
| 9:47 | 3 | 6 | 0.5 | 70.47 | 6.36 | 23.18 | 48 | 2.75 | 7.32 | +83 | Clear | | |
| Purge Start Time | Purge End Time | Average Flow (gpm) | Total Gallons Purged | Total Casing Volumes Purged | 80% Recovery Water Level Depth | Water Level at Sampling Time (ft-bmp) | Sample Collection Time | Sample Identification | | | | | |
| 9:38 | 9:47 | 0.6 | 6 | 3 | 72.41 | 70.74 | 9:51 | BL_3_WG032703_0001 | | | | | |
| Notes: Equipment Blank Collected (9:15): EB_TAIT032703_0001; Field Blank Collected (9:25): FB_TAIT032703_0001 | | | | | | | | | | | | | |

ft-bmp = feet below measuring point
LNAPL = light non-aqueous phase liquid

Groundwater Sampling Data Sheet

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|--|------------------------------|---|-----------------------------|------------------------------------|---------------------------------------|--|--|--|--------------------------------|--|-----------------------|
| Project Name: BRC, Former C-6 Facility (March 2003) | | | | | | | Date: 03/27/03 | | | | |
| Project No.: EM-2303 | | | | | | | Prepared By: CC/SM | | | | |
| Well Identification: WCC_3S | | | | | | | Pump Intake Depth (ft-bmp): ~71 | | | | |
| Measurement Point Description: Top of Casing | | | | | | | | | | | |
| Depth to LNAPL (ft-bmp) | | Depth to Static Water Level (ft-bmp) | | Well Total Depth (ft-bmp) | | Water Column Height (ft) | | LNAPL Thickness (ft) | | One (1) Casing Volume (gallons) | |
| ND | | 64.18 | | 88.81 | | 24.63 | | ND | | 16 | |
| Well Diameter (in) | | | | Gallons/Foot | | | | Field Equipment: Horiba U-22, Solinst Water Level Meter | | | |
| | | | | 0.75 | 2 | 4 | 6 | Purge Method: 2-Inch Diameter Grundfos Pump with Dedicated Tubing | | | |
| 0.75 | 2 | 4 | 6 | 0.02 | 0.16 | 0.65 | 1.47 | Well Condition: Soft Bottom | | | |
| Time | Casing Volumes Purged | Volume Purged (gallons) | Flow Rate (gpm) | Water Level (ft-bmp) | Ph | Temperature (°C) | Turbidity (NTU) | Conductivity (mS/cm) | Dissolved Oxygen (mg/L) | ORP (mV) | Observations |
| 11:02 | 0.5 | 8 | 1.6 | 64.39 | 6.26 | 24.75 | 650 | 1.55 | 8.66 | -103 | Slightly Gray, Odor |
| 11:09 | 1 | 16 | 1.2 | 64.42 | 6.15 | 23.90 | 420 | 1.42 | 8.13 | -115 | Clear |
| 11:17 | 1.5 | 24 | 1 | 64.42 | 6.72 | 22.35 | 380 | 1.39 | 7.33 | -110 | Slightly Cloudy, Odor |
| 11:25 | 2 | 32 | 1 | 64.37 | 6.66 | 23.50 | 210 | 1.36 | 5.69 | -89 | Slightly Cloudy, Odor |
| 11:37 | 2.5 | 40 | 0.9 | 64.37 | 6.60 | 23.60 | 100 | 1.30 | 5.62 | -88 | Slightly Cloudy, Odor |
| 11:45 | 3 | 48 | 1 | 64.47 | 6.57 | 26.63 | 45 | 1.35 | 4.99 | -85 | Slightly Cloudy, Odor |
| Purge Start Time | Purge End Time | Average Flow (gpm) | Total Gallons Purged | Total Casing Volumes Purged | 80% Recovery Water Level Depth | Water Level at Sampling Time (ft-bmp) | Sample Collection Time | Sample Identification | | | |
| 10:57 | 11:50 | 1 | 48 | 3 | 69.12 | 64.44 | 11:48 | WCC_03S_WG032703_0001 | | | |
| Notes: | | | | | | | | | | | |

ft-bmp = feet below measuring point
 LNAPL = light non-aqueous phase liquid

Groundwater Sampling Data Sheet

| | | | | | | | | | | | | | |
|--|------------------------------|---|-----------------------------|------------------------------------|---------------------------------------|--|-------------------------------|--|--------------------------------|--|---------------------|---|--|
| Project Name: BRC, Former C-6 Facility (March 2003) | | | | | | Date: 03/27/03 | | | | | | | |
| Project No.: EM-2303 | | | | | | Prepared By: CC/SM | | | | | | | |
| Well Identification: TMW_1 | | | | | | Pump Intake Depth (ft-bmp): ~80 | | | | | | | |
| Measurement Point Description: Top of Casing, Bluemark | | | | | | | | | | | | | |
| Depth to LNAPL (ft-bmp) | | Depth to Static Water Level (ft-bmp) | | Well Total Depth (ft-bmp) | | Water Column Height (ft) | | LNAPL Thickness (ft) | | One (1) Casing Volume (gallons) | | Three (3) Casing Volumes (gallons) | |
| ND | | 69.59 | | 85.59 | | 16 | | ND | | 2.5 | | 7.5 | |
| Well Diameter (in) | | | | Gallons/Foot | | | | Field Equipment: Horiba U-22, Solinst Water Level Meter | | | | | |
| | | | | 0.75 | 2 | 4 | 6 | Purge Method: 2-Inch Diameter Grundfos Pump with Dedicated Tubing | | | | | |
| 0.75 | 2 | 4 | 6 | 0.02 | 0.16 | 0.65 | 1.47 | Well Condition: Good | | | | | |
| Time | Casing Volumes Purged | Volume Purged (gallons) | Flow Rate (gpm) | Water Level (ft-bmp) | Ph | Temperature (°C) | Turbidity (NTU) | Conductivity (mS/cm) | Dissolved Oxygen (mg/L) | ORP (mV) | Observations | | |
| 13:03 | 0.5 | 1.25 | 0.6 | 70.16 | 6.39 | 25.27 | --- | 5.75 | 8.4 | +87 | Cloudy | | |
| 13:07 | 1 | 2.5 | 0.3 | 70.14 | 6.45 | 24.03 | --- | 5.49 | 7.26 | +87 | Slightly Cloudy | | |
| 13:09 | 1.5 | 3.75 | 0.4 | 70.14 | 6.51 | 23.95 | --- | 5.48 | 6.89 | +85 | Slightly Cloudy | | |
| 13:13 | 2 | 5 | 0.3 | 70.14 | 6.55 | 23.27 | --- | 5.41 | 6.65 | +81 | Slightly Cloudy | | |
| 13:15 | 2.5 | 6.25 | 0.6 | 70.14 | 6.61 | 23.21 | --- | 5.39 | 6.61 | +80 | Slightly Cloudy | | |
| 13:18 | 3 | 7.5 | 0.4 | 70.10 | 6.65 | 23.52 | --- | 5.37 | 6.62 | +80 | Slightly Cloudy | | |
| Purge Start Time | Purge End Time | Average Flow (gpm) | Total Gallons Purged | Total Casing Volumes Purged | 80% Recovery Water Level Depth | Water Level at Sampling Time (ft-bmp) | Sample Collection Time | Sample Identification | | | | | |
| 13:01 | 13:18 | 0.4 | 7.5 | 3 | 72.79 | 70.10 | 13:20 | TMW_1_WG032703_0001 | | | | | |
| Notes: Pump stopped at 13:04 and was re-started at 13:05. | | | | | | | | | | | | | |

ft-bmp = feet below measuring point
 LNAPL = light non-aqueous phase liquid

Groundwater Sampling Data Sheet

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|--|------------------------------|---|-----------------------------|------------------------------------|---------------------------------------|--|--|--|--------------------------------|--|---------------------|---|--|
| Project Name: BRC, Former C-6 Facility (March 2003) | | | | | | | Date: 03/27/03 | | | | | | |
| Project No.: EM-2303 | | | | | | | Prepared By: CC/SM | | | | | | |
| Well Identification: TMW_4 | | | | | | | Pump Intake Depth (ft-bmp): ~72 | | | | | | |
| Measurement Point Description: Top of Casing | | | | | | | | | | | | | |
| Depth to LNAPL (ft-bmp) | | Depth to Static Water Level (ft-bmp) | | Well Total Depth (ft-bmp) | | Water Column Height (ft) | | LNAPL Thickness (ft) | | One (1) Casing Volume (gallons) | | Three (3) Casing Volumes (gallons) | |
| ND | | 66.04 | | 80.24 | | 14.2 | | ND | | 2.28 | | 6.8 | |
| Well Diameter (in) | | | | Gallons/Foot | | | | Field Equipment: Horiba U-22, Solinst Water Level Meter | | | | | |
| | | | | 0.75 | 2 | 4 | 6 | Purge Method: 2-Inch Diameter Grundfos Pump with Dedicated Tubing | | | | | |
| 0.75 | 2 | 4 | 6 | 0.02 | 0.16 | 0.65 | 1.47 | Well Condition: Good, Soft Bottom | | | | | |
| Time | Casing Volumes Purged | Volume Purged (gallons) | Flow Rate (gpm) | Water Level (ft-bmp) | Ph | Temperature (°C) | Turbidity (NTU) | Conductivity (mS/cm) | Dissolved Oxygen (mg/L) | ORP (mV) | Observations | | |
| 14:12 | 0.5 | 1.25 | 0.25 | 66.57 | 6.60 | 23.08 | --- | 1.51 | 5.87 | +124 | Cloudy | | |
| 14:15 | 1 | 2.5 | 0.4 | 66.40 | 6.64 | 23.00 | --- | 1.49 | 5.45 | +119 | Cloudy | | |
| 14:17 | 1.5 | 3.75 | 0.6 | 66.21 | 6.66 | 23.01 | --- | 1.41 | 5.31 | +115 | Cloudy | | |
| 14:19 | 2 | 5 | 0.6 | 66.13 | 6.69 | 22.99 | --- | 1.40 | 5.24 | +113 | Cloudy | | |
| 14:21 | 2.5 | 6.25 | 0.6 | 66.13 | 6.60 | 23.13 | --- | 1.44 | 5.01 | +111 | Clear | | |
| 14:24 | 3 | 7.5 | 0.6 | 66.56 | 6.58 | 22.94 | --- | 1.41 | 5.10 | +113 | Clear | | |
| Purge Start Time | Purge End Time | Average Flow (gpm) | Total Gallons Purged | Total Casing Volumes Purged | 80% Recovery Water Level Depth | Water Level at Sampling Time (ft-bmp) | Sample Collection Time | Sample Identification | | | | | |
| 14:07 | 14:24 | 0.4 | 7.5 | 3.3 | 68.88 | 66.56 | 14:25 | TMW_4_WG032703_0001 | | | | | |
| Notes: | | | | | | | | | | | | | |

ft-bmp = feet below measuring point
 LNAPL = light non-aqueous phase liquid

Groundwater Sampling Data Sheet

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|---|------------------------------|---|-----------------------------|------------------------------------|---------------------------------------|--|-------------------------------|--|--------------------------------|--|---------------------|
| Project Name: BRC, Former C-6 Facility (March 2003) | | | | | | Date: 03/27/03 | | | | | |
| Project No.: EM-2303 | | | | | | Prepared By: CC/SM | | | | | |
| Well Identification: TMW_7 | | | | | | Pump Intake Depth (ft-bmp): ~78 | | | | | |
| Measurement Point Description: Top of Casing | | | | | | | | | | | |
| Depth to LNAPL (ft-bmp) | | Depth to Static Water Level (ft-bmp) | | Well Total Depth (ft-bmp) | | Water Column Height (ft) | | LNAPL Thickness (ft) | | One (1) Casing Volume (gallons) | |
| ND | | 65.97 | | 83.59 | | 17.62 | | ND | | 2.8 | |
| Well Diameter (in) | | | | Gallons/Foot | | | | Field Equipment: Horiba U-22, Solinst Water Level Meter | | | |
| | | | | 0.75 | 2 | 4 | 6 | Purge Method: 2-Inch Diameter Grundfos Pump with Dedicated Tubing | | | |
| 0.75 | 2 | 4 | 6 | 0.02 | 0.16 | 0.65 | 1.47 | Well Condition: Good, Soft Bottom | | | |
| Time | Casing Volumes Purged | Volume Purged (gallons) | Flow Rate (gpm) | Water Level (ft-bmp) | Ph | Temperature (°C) | Turbidity (NTU) | Conductivity (mS/cm) | Dissolved Oxygen (mg/L) | ORP (mV) | Observations |
| 15:08 | 0.5 | 1.4 | 0.4 | 66.56 | 7.05 | 23.15 | --- | 1.69 | 9.82 | +186 | Slightly Turbid |
| 15:10 | 1 | 2.8 | 0.7 | 66.48 | 6.68 | 23.22 | --- | 1.64 | 6.41 | +174 | Slightly Turbid |
| 15:12 | 1.5 | 4.2 | 0.7 | 66.48 | 6.64 | 23.31 | --- | 1.61 | 6.36 | +168 | Slightly Turbid |
| 15:14 | 2 | 5.6 | 0.7 | 66.48 | 6.65 | 23.39 | --- | 1.62 | 6.11 | +155 | Clear |
| 15:16 | 2.5 | 7.0 | 0.7 | 66.46 | 6.63 | 23.45 | --- | 1.62 | 6.08 | +153 | Clear |
| 15:17 | 3 | 8.4 | 1.4 | 66.47 | 6.61 | 23.51 | --- | 1.61 | 6.06 | +151 | Clear |
| Purge Start Time | Purge End Time | Average Flow (gpm) | Total Gallons Purged | Total Casing Volumes Purged | 80% Recovery Water Level Depth | Water Level at Sampling Time (ft-bmp) | Sample Collection Time | Sample Identification | | | |
| 15:04 | 15:19 | 0.6 | 8.4 | 3 | 69.49 | 66.47 | 15:19 | TMW_7_WG032703_0001 | | | |
| Notes: Collected Equipment Blank (15:24): EB_TAIT032703_0002 | | | | | | | | | | | |

ft-bmp = feet below measuring point
 LNAPL = light non-aqueous phase liquid

Groundwater Sampling Data Sheet

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|--|------------------------------|---|-----------------------------|------------------------------------|---------------------------------------|--|--|--|--------------------------------|--|---------------------|---|
| Project Name: BRC, Former C-6 Facility (March 2003) | | | | | | | Date: 03/28/03 | | | | | |
| Project No.: EM-2303 | | | | | | | Prepared By: SM/CC | | | | | |
| Well Identification: XMW_19 | | | | | | | Pump Intake Depth (ft-bmp): ~70 | | | | | |
| Measurement Point Description: Top of Casing | | | | | | | | | | | | |
| Depth to LNAPL (ft-bmp) | | Depth to Static Water Level (ft-bmp) | | Well Total Depth (ft-bmp) | | Water Column Height (ft) | | LNAPL Thickness (ft) | | One (1) Casing Volume (gallons) | | Three (3) Casing Volumes (gallons) |
| ND | | 60.87 | | 77.33 | | 16.46 | | ND | | 10.7 | | 32.10 |
| Well Diameter (in) | | | | Gallons/Foot | | | | Field Equipment: Horiba U-22, Solinst Water Level Meter | | | | |
| | | | | 0.75 | 2 | 4 | 6 | Purge Method: 2-Inch Diameter Grundfos Pump with Dedicated Tubing | | | | |
| 0.75 | 2 | 4 | 6 | 0.02 | 0.16 | 0.65 | 1.47 | Well Condition: Solid Bottom | | | | |
| Time | Casing Volumes Purged | Volume Purged (gallons) | Flow Rate (gpm) | Water Level (ft-bmp) | Ph | Temperature (°C) | Turbidity (NTU) | Conductivity (mS/cm) | Dissolved Oxygen (mg/L) | ORP (mV) | Observations | |
| 10:53 | 0.5 | 5.35 | 2.68 | 61.23 | 7.40 | 23.9 | >999 | 1.82 | 11.77 | +155 | Silty, No Odor | |
| 10:58 | 1 | 10.70 | 1.07 | 61.68 | 7.36 | 23.9 | >999 | 1.67 | 11.50 | +90 | Silty, No Odor | |
| 11:01 | 1.5 | 16.05 | 1.78 | 61.15 | 7.27 | 23.8 | >999 | 1.68 | 11.42 | +136 | Silty, No Odor | |
| 11:06 | 2 | 21.40 | 1.07 | 61.66 | 7.72 | 23.6 | >999 | 1.66 | 11.82 | +137 | Silty, No Odor | |
| 11:12 | 2.5 | 26.75 | 0.89 | 61.66 | 7.30 | 23.7 | 241 | 1.64 | 12.11 | +143 | Silty, No Odor | |
| 11:15 | 3 | 32.10 | 1.67 | 61.61 | 7.29 | 23.6 | 244 | 1.65 | 12.38 | +142 | Silty, No Odor | |
| Purge Start Time | Purge End Time | Average Flow (gpm) | Total Gallons Purged | Total Casing Volumes Purged | 80% Recovery Water Level Depth | Water Level at Sampling Time (ft-bmp) | Sample Collection Time | Sample Identification | | | | |
| 10:51 | 11:15 | 1.34 | 32.10 | 3 | 64.16 | 61.61 | 11:25 | XMW_19_WG032803_0001 | | | | |
| Notes: Collected Duplicate @ 11:27: XWM_19_WG032803_0002. Collected Field Blank: FB_TAIT022803_0001 | | | | | | | | | | | | |

ft-bmp = feet below measuring point
 LNAPL = light non-aqueous phase liquid

Groundwater Sampling Data Sheet

| | | | | | | | | | | | |
|--|------------------------------|---|-----------------------------|------------------------------------|---------------------------------------|--|-------------------------------|--|--------------------------------|--|---------------------|
| Project Name: BRC, Former C-6 Facility (March 2003) | | | | | | Date: 03/28/03 | | | | | |
| Project No.: EM-2303 | | | | | | Prepared By: SM/CC | | | | | |
| Well Identification: TMW_08 | | | | | | Pump Intake Depth (ft-bmp): ~77 | | | | | |
| Measurement Point Description: Top of Casing | | | | | | | | | | | |
| Depth to LNAPL (ft-bmp) | | Depth to Static Water Level (ft-bmp) | | Well Total Depth (ft-bmp) | | Water Column Height (ft) | | LNAPL Thickness (ft) | | One (1) Casing Volume (gallons) | |
| ND | | 67.71 | | 82.61 | | 14.90 | | ND | | 2.38 | |
| Well Diameter (in) | | | | Gallons/Foot | | | | Field Equipment: Horiba U-22, Solinst Water Level Meter | | | |
| | | | | 0.75 | 2 | 4 | 6 | Purge Method: 2-Inch Diameter Grundfos Pump with Dedicated Tubing | | | |
| 0.75 | 2 | 4 | 6 | 0.02 | 0.16 | 0.65 | 1.47 | Well Condition: Soft Bottom | | | |
| Time | Casing Volumes Purged | Volume Purged (gallons) | Flow Rate (gpm) | Water Level (ft-bmp) | Ph | Temperature (°C) | Turbidity (NTU) | Conductivity (mS/cm) | Dissolved Oxygen (mg/L) | ORP (mV) | Observations |
| 12:50 | 0.5 | 1.19 | 0.60 | 68.16 | 6.86 | 23.9 | 641 | 1.74 | 12.87 | --- | Cloudy, No Odor |
| 12:52 | 1 | 2.38 | 0.60 | 68.20 | 7.02 | 23.2 | 185 | 1.63 | 12.90 | --- | Cloudy, No Odor |
| 12:54 | 1.5 | 3.57 | 0.60 | 68.14 | 7.04 | 22.9 | 55 | 1.65 | 12.88 | --- | Clear |
| 12:56 | 2 | 4.76 | 0.60 | 68.14 | 7.03 | 23.1 | 30 | 1.66 | 12.68 | --- | Clear |
| 12:58 | 2.5 | 5.95 | 0.60 | 68.12 | 6.91 | 23.2 | 26 | 1.65 | 12.41 | --- | Clear |
| 13:00 | 3 | 7.14 | 0.60 | 68.11 | 7.06 | 23.1 | 24 | 1.65 | 12.51 | --- | Clear |
| Purge Start Time | Purge End Time | Average Flow (gpm) | Total Gallons Purged | Total Casing Volumes Purged | 80% Recovery Water Level Depth | Water Level at Sampling Time (ft-bmp) | Sample Collection Time | Sample Identification | | | |
| 12:48 | 13:00 | 0.60 | 7.14 | 3 | 70.69 | 68.11 | 13:01 | TMW_08_WG032803_0001 | | | |
| Notes: | | | | | | | | | | | |

ft-bmp = feet below measuring point
 LNAPL = light non-aqueous phase liquid

Groundwater Sampling Data Sheet

| | | | | | | | | | | | |
|--|------------------------------|---|-----------------------------|------------------------------------|---------------------------------------|--|-------------------------------|--|--------------------------------|--|---------------------|
| Project Name: BRC, Former C-6 Facility (March 2003) | | | | | | Date: 03/28/03 | | | | | |
| Project No.: EM-2303 | | | | | | Prepared By: SM/CC | | | | | |
| Well Identification: TMW_02 | | | | | | Pump Intake Depth (ft-bmp): ~80 | | | | | |
| Measurement Point Description: Top of Casing | | | | | | | | | | | |
| Depth to LNAPL (ft-bmp) | | Depth to Static Water Level (ft-bmp) | | Well Total Depth (ft-bmp) | | Water Column Height (ft) | | LNAPL Thickness (ft) | | One (1) Casing Volume (gallons) | |
| ND | | 69.94 | | 85.09 | | 15.15 | | ND | | 2.42 | |
| Well Diameter (in) | | | | Gallons/Foot | | | | Field Equipment: Horiba U-22, Solinst Water Level Meter | | | |
| | | | | 0.75 | 2 | 4 | 6 | Purge Method: 2-Inch Diameter Grundfos Pump with Dedicated Tubing | | | |
| 0.75 | 2 | 4 | 6 | 0.02 | 0.16 | 0.65 | 1.47 | Well Condition: | | | |
| Time | Casing Volumes Purged | Volume Purged (gallons) | Flow Rate (gpm) | Water Level (ft-bmp) | Ph | Temperature (°C) | Turbidity (NTU) | Conductivity (mS/cm) | Dissolved Oxygen (mg/L) | ORP (mV) | Observations |
| 15:59 | 0.5 | 1.21 | 0.61 | 72.92 | 6.76 | 24.7 | 275 | 2.61 | 11.72 | --- | Cloudy, Odor |
| 14:02 | 1 | 2.42 | 0.61 | 72.94 | 6.90 | 23.4 | 279 | 2.65 | 12.25 | --- | Cloudy, Odor |
| 14:04 | 1.5 | 3.63 | 0.61 | 72.21 | 6.87 | 23.0 | 312 | 2.65 | 12.18 | --- | Cloudy, Odor |
| 14:06 | 2 | 4.84 | 0.61 | 72.17 | 7.02 | 23.0 | 156 | 2.75 | 11.83 | --- | Clear, Odor |
| 14:08 | 2.5 | 6.05 | 0.61 | 72.07 | 6.87 | 23.0 | 98 | 2.66 | 11.64 | --- | Clear, Odor |
| 14:10 | 3 | 7.27 | 0.61 | 72.07 | 6.94 | 22.8 | 6 | 2.69 | 11.59 | --- | Clear, Odor |
| Purge Start Time | Purge End Time | Average Flow (gpm) | Total Gallons Purged | Total Casing Volumes Purged | 80% Recovery Water Level Depth | Water Level at Sampling Time (ft-bmp) | Sample Collection Time | Sample Identification | | | |
| 13:57 | 14:10 | 0.61 | 7.27 | 3 | 72.97 | 72.07 | 14:11 | TMW_02_WG032803_0001 | | | |
| Notes: | | | | | | | | | | | |

ft-bmp = feet below measuring point
 LNAPL = light non-aqueous phase liquid

Groundwater Sampling Data Sheet

| | | | | | | | | | | | | |
|--|------------------------------|---|-----------------------------|------------------------------------|---------------------------------------|--|--|--|--------------------------------|--|---------------------|---|
| Project Name: BRC, Former C-6 Facility (March 2003) | | | | | | | Date: 03/28/03 | | | | | |
| Project No.: EM-2303 | | | | | | | Prepared By: SM/CC | | | | | |
| Well Identification: TMW_05 | | | | | | | Pump Intake Depth (ft-bmp): ~78 | | | | | |
| Measurement Point Description: Top of Casing | | | | | | | | | | | | |
| Depth to LNAPL (ft-bmp) | | Depth to Static Water Level (ft-bmp) | | Well Total Depth (ft-bmp) | | Water Column Height (ft) | | LNAPL Thickness (ft) | | One (1) Casing Volume (gallons) | | Three (3) Casing Volumes (gallons) |
| ND | | 67.61 | | 82.92 | | 15.31 | | ND | | 2.45 | | 7.35 |
| Well Diameter (in) | | | | Gallons/Foot | | | | Field Equipment: Hanna Water Parameter Meter, Solinst Water Level Meter | | | | |
| | | | | 0.75 | 2 | 4 | 6 | Purge Method: 2-Inch Diameter Grundfos Pump with Dedicated Tubing | | | | |
| 0.75 | 2 | 4 | 6 | 0.02 | 0.16 | 0.65 | 1.47 | Well Condition: Solid Bottom | | | | |
| Time | Casing Volumes Purged | Volume Purged (gallons) | Flow Rate (gpm) | Water Level (ft-bmp) | Ph | Temperature (°C) | Turbidity (NTU) | Conductivity (mS/cm) | Dissolved Oxygen (mg/L) | ORP (mV) | Observations | |
| 15:06 | 0.5 | 1.23 | 0.21 | 67.78 | 7.43 | 23.2 | 271 | 0.95 | 11.21 | +147 | Cloudy, No Odor | |
| 15:16 | 1 | 2.45 | 0.41 | 67.85 | 7.71 | 22.4 | 114 | 0.91 | 11.16 | +146 | Cloudy, No Odor | |
| 15:19 | 1.5 | 3.69 | 0.41 | 67.87 | 7.76 | 22.3 | 97 | 0.67 | 11.05 | +123 | Cloudy, No Odor | |
| 15:21 | 2 | 4.92 | 0.62 | 67.71 | 7.75 | 20.5 | 39 | 0.61 | 11.85 | +123 | Clearing, No Odor | |
| 15:24 | 2.5 | 6.15 | 0.41 | 67.73 | 7.66 | 22.2 | 38 | 0.65 | 10.65 | +141 | Clearing, No Odor | |
| 15:26 | 3 | 7.38 | 0.62 | 67.71 | 7.58 | 21.8 | 21 | 0.65 | 10.16 | +152 | Clear, No Odor | |
| Purge Start Time | Purge End Time | Average Flow (gpm) | Total Gallons Purged | Total Casing Volumes Purged | 80% Recovery Water Level Depth | Water Level at Sampling Time (ft-bmp) | Sample Collection Time | Sample Identification | | | | |
| 15:00 | 15:26 | 0.28 | 7.38 | 3 | 70.67 | 67.71 | 15:26 | TMW_05_WG032803_0001 | | | | |
| Notes: 15:08 Pump Stopped, 15:15 Pump Re-Started. | | | | | | | | | | | | |

ft-bmp = feet below measuring point
 LNAPL = light non-aqueous phase liquid

Groundwater Sampling Data Sheet

| | | | | | | | | | | | | |
|--|------------------------------|---|-----------------------------|------------------------------------|---------------------------------------|--|--|--|--------------------------------|--|---------------------|---|
| Project Name: BRC, Former C-6 Facility (March 2003) | | | | | | | Date: 03/28/03 | | | | | |
| Project No.: EM-2303 | | | | | | | Prepared By: SM/CC | | | | | |
| Well Identification: DAC_P1 | | | | | | | Pump Intake Depth (ft-bmp): ~79 | | | | | |
| Measurement Point Description: Top of Casing | | | | | | | | | | | | |
| Depth to LNAPL (ft-bmp) | | Depth to Static Water Level (ft-bmp) | | Well Total Depth (ft-bmp) | | Water Column Height (ft) | | LNAPL Thickness (ft) | | One (1) Casing Volume (gallons) | | Three (3) Casing Volumes (gallons) |
| ND | | 65.57 | | 90.42 | | 24.85 | | ND | | 16.15 | | 48.75 |
| Well Diameter (in) | | | | Gallons/Foot | | | | Field Equipment: Hanna Water Parameter Meter, Solinst Water Level Meter | | | | |
| | | | | 0.75 | 2 | 4 | 6 | Purge Method: 2-Inch Diameter Grundfos Pump with Dedicated Tubing | | | | |
| 0.75 | 2 | 4 | 6 | 0.02 | 0.16 | 0.65 | 1.47 | Well Condition: Soft Bottom | | | | |
| Time | Casing Volumes Purged | Volume Purged (gallons) | Flow Rate (gpm) | Water Level (ft-bmp) | Ph | Temperature (°C) | Turbidity (NTU) | Conductivity (mS/cm) | Dissolved Oxygen (mg/L) | ORP (mV) | Observations | |
| 16:22 | 0.5 | 8.13 | 1.16 | 67.93 | 7.03 | 23.0 | 39 | 2.42 | 10.35 | +174 | Clear, No Odor | |
| 16:27 | 1 | 16.25 | 1.62 | 68.12 | 7.17 | 22.6 | 61 | 2.26 | 9.55 | +127 | Clear, No Odor | |
| 16:32 | 1.5 | 24.39 | 1.63 | 68.21 | 7.11 | 22.6 | 44 | 2.36 | 9.38 | +179 | Clear, No Odor | |
| 16:40 | 2 | 32.52 | 1.0 | 68.32 | 7.12 | 22.6 | 0 | 2.38 | 9.34 | +217 | Clear, No Odor | |
| 16:46 | 2.5 | 40.65 | 1.4 | 68.30 | 7.13 | 22.4 | 0 | 2.61 | 9.71 | +211 | Clear, No Odor | |
| 16:53 | 3 | 48.75 | 1.2 | 68.33 | 7.16 | 22.1 | 0 | 2.44 | 9.98 | +86 | Clear, No Odor | |
| Purge Start Time | Purge End Time | Average Flow (gpm) | Total Gallons Purged | Total Casing Volumes Purged | 80% Recovery Water Level Depth | Water Level at Sampling Time (ft-bmp) | Sample Collection Time | Sample Identification | | | | |
| 16:15 | 16:55 | 1.2 | 48.75 | 3 | 70.54 | 68.33 | 16:53 | DAC_P1_WG032803_0001 | | | | |
| Notes: | | | | | | | | | | | | |

ft-bmp = feet below measuring point
 LNAPL = light non-aqueous phase liquid

Groundwater Sampling Data Sheet

| | | | | | | | | | | | | | |
|--|-----------------------|---|----------------------|----------------------------------|--------------------------------|---------------------------------------|--|--|-------------------------|--|----------------|---|--|
| Project Name: BRC, Former C-6 Facility (March 2003) | | | | | | | Date: 03/28/03 | | | | | | |
| Project No.: EM-2303 | | | | | | | Prepared By: SM/CC | | | | | | |
| Well Identification: WCC_7S | | | | | | | Pump Intake Depth (ft-bmp): ~72 | | | | | | |
| Measurement Point Description: Top of Casing, Notch | | | | | | | | | | | | | |
| Depth to LNAPL (ft-bmp) | | Depth to Static Water Level (ft-bmp) | | Well Total Depth (ft-bmp) | | Water Column Height (ft) | | LNAPL Thickness (ft) | | One (1) Casing Volume (gallons) | | Three (3) Casing Volumes (gallons) | |
| ND | | 63.71 | | 90.43 | | 26.72 | | ND | | 17.37 | | 52.11 | |
| Well Diameter (in) | | | | Gallons/Foot | | | | Field Equipment: Hanna Water Parameter Meter, Solinst Water Level Meter | | | | | |
| | | | | 0.75 | 2 | 4 | 6 | Purge Method: 2-Inch Diameter Grundfos Pump with Dedicated Tubing | | | | | |
| 0.75 | 2 | 4 | 6 | 0.02 | 0.16 | 0.65 | 1.47 | Well Condition: Soft Bottom, Well Requires New Expansion Cap | | | | | |
| Time | Casing Volumes Purged | Volume Purged (gallons) | Flow Rate (gpm) | Water Level (ft-bmp) | Ph | Temperature (°C) | Turbidity (NTU) | Conductivity (mS/cm) | Dissolved Oxygen (mg/L) | ORP (mV) | Observations | | |
| 17:37 | 0.5 | 8.69 | 1.24 | 64.12 | 7.53 | 22.2 | 5 | 2.09 | 9.85 | +174 | Clear, No Odor | | |
| 17:44 | 1 | 17.38 | 1.24 | 64.13 | 7.31 | 21.9 | 10 | 1.94 | 9.96 | +136 | Clear, No Odor | | |
| 17:50 | 1.5 | 26.07 | 1.45 | 64.14 | 7.30 | 22.0 | 8 | 1.73 | 9.42 | +179 | Clear, No Odor | | |
| 17:57 | 2 | 34.76 | 1.24 | 64.15 | 7.31 | 21.8 | 9 | 1.62 | 9.42 | +197 | Clear, No Odor | | |
| 18:02 | 2.5 | 43.45 | 1.74 | 64.17 | 7.30 | 22.0 | 10 | 1.59 | 9.18 | +153 | Clear, No Odor | | |
| 18:08 | 3 | 52.14 | 1.45 | 64.16 | 7.32 | 21.3 | 5 | 1.79 | 9.63 | +175 | Clear, No Odor | | |
| Purge Start Time | Purge End Time | Average Flow (gpm) | Total Gallons Purged | Total Casing Volumes Purged | 80% Recovery Water Level Depth | Water Level at Sampling Time (ft-bmp) | Sample Collection Time | Sample Identification | | | | | |
| 17:30 | 18:08 | 1.37 | 52.14 | 3 | 69.05 | 64.16 | 18:08 | WCC_7S_WG032803_0001 | | | | | |
| Notes: | | | | | | | | | | | | | |

ft-bmp = feet below measuring point
 LNAPL = light non-aqueous phase liquid



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DAILY FIELD REPORT

| | | |
|---|------------------|----------------------|
| Project Name: <u>March 2003 Sampling Boeing C-17 Torrance</u> | Project #: | Date: <u>3/25/03</u> |
| Personnel: <u>NE/CC</u> | Sub Contractors: | |

Task: Sample groundwater wells per March 2003 Sampling protocol.

| | | |
|-----------------------|-----------------|----------------------|
| Time Arrived at Site: | Time Left Site: | Total Hours at Site: |
| Odometer (Start): | Odometer (End): | Total Miles: |

Equipment List:

- ☒ Solinst Water Level Meter Serial #: _____
- ☐ Solinst Water/Product Level Interface Meter Serial #: _____
- ☒ Horiba U-22 Water Quality Meter Serial #: _____
- ☐ PID/FID Type: _____ Serial #: _____
- ☒ Submersible Pump Type: 2" Grundfos Serial #: _____
- ☒ Generator Type: _____ Serial #: _____
- ☐ Company Truck License #: _____
- ☒ Other(s): Rediflow Var. Freq. Met^{NC} Drive.

Description of Work Performed: (Summarize all field activities in a chronological sequence. Include tailgate health and safety meeting, personnel/visitors at site, calibration times and methods.)

Arrived on site at 7:00 a.m.
Conducted tailgate health and safety meeting.
Set up decon station, decontaminated equipment.

Client Signature (if applicable): _____ Date: _____



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March 2003 Sampling
Project Name: Breeding C-6, Torrance Project #: EM2303 Date: 3/25/03

Calibrated Horiba U-22, and Solinst

A.M. - Dug ~~up~~^{NC} to uncover buried wells and gauged.

Could not locate WCC-125 under dirt.

Removed tubing from TMW-2 to gauge.

~~WCC-45~~^{NC} could not access WCC-45 due to materials/trash
dumpster on top. Broken glass and metal pieces.

11:03 - start purging WCC-55.

11:35 - Collected sample ~~WCC-55~~^{NC} WCC-55-WG032503-0001.

12:54 - start purge WCC-65.

13:45^{NC} - collected sample WCC-65-WG032503-0001



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DAILY FIELD REPORT

| | | |
|--|-----------------------------------|-----------------------------|
| Project Name: <u>March 2003 Sampling</u> <u>BREC-6, Torrance</u> | Project #: <u>EM2303</u> | Date: <u>3/26/03</u> |
| Personnel: <u>NC/CC</u> | Sub Contractors: <u>NA</u> | |

Task: Sample groundwater wells per March 2003
GW sampling protocol.

| | | |
|------------------------------|------------------------|-----------------------------|
| Time Arrived at Site: | Time Left Site: | Total Hours at Site: |
| Odometer (Start): | Odometer (End): | Total Miles: |

Equipment List:

- ☒ Solinst Water Level Meter Serial #: _____
- ☐ Solinst Water/Product Level Interface Meter Serial #: _____
- ☒ Horiba U-22 Water Quality Meter Serial #: _____
- ☐ PID/FID Type: _____ Serial #: _____
- ☒ Submersible Pump Type: 2" Grundfos. Serial #: _____
- ☒ Generator Type: _____ Serial #: _____
- ☐ Company Truck License #: _____
- ☒ Other(s): Rediflow Var. Freq. Drive.

Description of Work Performed: (Summarize all field activities in a chronological sequence. Include tailgate health and safety meeting, personnel/visitors at site, calibration times and methods.)

Arrived on site at 7:00 a.m.
Set up decon station, decontaminated equipment.
Conducted tailgate health and safety meeting.

Client Signature (if applicable): _____ **Date:** _____



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| | | |
|-------------------------------|-------------------|---------------|
| March 2003 Sampling | | |
| Project Name: BRE-6, Torrance | Project #: EM2303 | Date: 3/26/03 |

Calibrated Horiba U-22 and Solinst.

8:23 - start purge TMW-10

8:40^{NC} - collected sample TMW-10-WG032603-0001

9:18 - start purge TMW-11

9:30 - collected sample TMW-11-WG032603-0001.

9:58 - start purge TMW-14

10:12 - collected sample TMW-14-WG032603-0001

11:02 - start purge TMW-15

11:25 - collected sample TMW-15-WG032603-0001

11:57 - start purge WCC-95.

unsafe to access well, trip hazard. Well box filled with mud up to top of casing. Well bottom very muddy.

12:25 - collected sample WCC-95-WG032603-0001

13:40 - start purge TMW-6

13:55 - collected sample TMW-6-WG032603-0001

14:30 - start purge^{NC} TMW-9.

Well casing above ground is very loose and removable.

Very difficult to keep upright, needs repair.

14:42 - collected sample TMW-9-WG032603-0001



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DAILY FIELD REPORT

| | | |
|----------------------------------|-----------------------------|----------------------|
| Project Name: <u>Boeing C-C</u> | Project #: <u>EM2903</u> | Date: <u>3/27/03</u> |
| Personnel: <u>Curt/Bulley</u> | Sub Contractors: <u>N/A</u> | |
| Task: <u>March 2003 Sampling</u> | | |

| | | |
|-----------------------------------|-----------------|----------------------|
| Time Arrived at Site: <u>0645</u> | Time Left Site: | Total Hours at Site: |
| Odometer (Start): | Odometer (End): | Total Miles: |

Equipment List:

- ☒ Solinst Water Level Meter Serial #: _____
- ☐ Solinst Water/Product Level Interface Meter Serial #: _____
- ☒ Horiba U-22 Water Quality Meter Serial #: _____
- ☐ PID/FID Type: _____ Serial #: _____
- ☒ Submersible Pump Type: grounded Serial #: _____
- ☒ Generator Type: portable Serial #: _____
- ☐ Company Truck License #: W haul
- ☐ Other(s): _____

Description of Work Performed: (Summarize all field activities in a chronological sequence. Include tailgate health and safety meeting, personnel/visitors at site, calibration times and methods.)

sampled 5 wells; 2 EB's; 1 TB, 1 FB, 1 DW

Client Signature (if applicable): Curtis Conn Date: 3/27/03

Page ____ of ____



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| | | |
|---------------|------------|-------|
| Project Name: | Project #: | Date: |
|---------------|------------|-------|

7:00AM MET AT Starbucks

7:56am Finally found FIRST Well, Conducted
Safety meeting, calibrated equipment
AND set up for Day. Created ~~EB+FB~~
labels etc. for

9:38 STARTED Purge BL3

9:50 SAMPLED

10:57 STARTED Purge WCC 03S. Access to
Well Difficult.

11:48 Sampled WCC-03S

12:27 Arrived @ well TMW1. Well was
challenging to find AND Access
was Difficult. HORIBA'S Turbidity
STOPPED WORKING Properly.

13:01 STARTED Purging TMW1

13:05 Restarted Purging After generator ceased.

13:20 Sampled.

14:07 STARTED Purging TMW-4 - TURBIDITY NOT WORKING

14:25 Sampled

15:04 STARTED Purge of TMW7

15:19 Sampled w/ A Duplicate ON TMW7

16:00 Left SITE for DAY



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DAILY FIELD REPORT

| | | |
|--------------------------------------|--------------------------|----------------------|
| Project Name: <u>Boeing Torrance</u> | Project #: <u>Em2403</u> | Date: <u>3/28/03</u> |
| Personnel: <u>SM/CC</u> | Sub Contractors: | |
| Task: <u>GW Sampling March 2003</u> | | |

| | | |
|-------------------------------------|-----------------|----------------------|
| Time Arrived at Site: <u>7:00AM</u> | Time Left Site: | Total Hours at Site: |
| Odometer (Start): | Odometer (End): | Total Miles: |

Equipment List:

- ☒ Solinst Water Level Meter Serial #: _____
- ☐ Solinst Water/Product Level Interface Meter Serial #: _____
- ☒ Horiba U-22 Water Quality Meter Serial #: _____
- ☐ PID/FID Type: _____ Serial #: _____
- ☒ Submersible Pump Type: Grundfos Serial #: _____
- ☒ Generator Type: Portable Serial #: _____
- ☒ Company Truck License #: Rental
- ☒ Other(s): Hanna Water Meter

Description of Work Performed: (Summarize all field activities in a chronological sequence. Include tailgate health and safety meeting, personnel/visitors at site, calibration times and methods.)

7:10AM - Returned to CC to Rent A Solinst
from Geotech
10:15 - Safety AND Calibration
10:51 - After locating well AND setting

Client Signature (if applicable): _____ Date: _____



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Project Name:

Project #:

Date:

up IN the DITCH, STARTED Purging.
11:25 Sampled XMW-19
12:48 Located TMW-08 AND STARTED Purging
13:01 Sampled
13:57 LOCATED TMW-02 AND STARTED Purging.
(Locating the wells is time consuming with little
Landmarks)
14:11 Sampled
15:00 Purged TMW-05 AND HAD the WATER Meter Deliver
15:15 RESTARTED Pump after ceased
15:26 Sampled
16:15 Purged DAC-P1
16:53 Sampled
17:30 STARTED Purging WCC-75. Well needs
new CAP
18:08 Sampled
18:44 left SITE



| | |
|--|---------------------------|
| Project Name: <u>BREING C-6 TORRANCE</u> | Project #: <u>EM 2303</u> |
|--|---------------------------|

Page __ of __



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QA/QA Sample Identification Form

| | |
|---|---------------------------|
| Project Name: BRC, Former C-6 Facility (March 2003 Sampling Event) | Project #: EM-2303 |
|---|---------------------------|

| Date | Time | QA/QC Sample Type (Duplicate, Field Blank, Equipment Blank, Split) | Sample ID | Sample Location | Primary Sample Reference | Analytical Method(s) | Organic-Free Water Source and Reference | Name |
|---------|-------|--|----------------------|--------------------|-----------------------------|-------------------------|--|-------|
| 3/25/03 | NA | TRIP BLANK | TB_TAIT032503_0001 | NA | NA | 8260B | NA | NC/CC |
| 3/26/03 | NA | TRIP BLANK | TB_TAIT032603_0001 | NA | NA | 8260B | NA | NC/CC |
| 3/27/03 | 9:45 | EQUIPMENT BLANK | EB_TAIT032703_0001 | BL3 | NA | 8260B | STL | SM/CC |
| 3/27/03 | 9:25 | FIELD BLANK | FB_TAIT032703_0001 | BL3 | NA | 8260B | STL | SM/CC |
| 3/27/03 | 15:19 | DUPLICATE | TMW_7_WG032703_0002 | TMW_7 | TMW_7_WG032703_0001 | 8260B | NA | SM/CC |
| 3/27/03 | NA | TRIP BLANK | TB_TAIT032703_0001 | NA | NA | 8260B | NA | SM/CC |
| 3/27/03 | 15:24 | EQUIPMENT BLANK | EB_TAIT032703_0002 | TMW_7 | NA | 8260B | STL | SM/CC |
| 3/28/03 | 11:27 | DUPLICATE | XMW_19_WG032803_0002 | XMW-19 | XMW19_WG032803_0001 | 8260B | NA | SM/CC |
| 3/28/03 | NA | TRIP BLANK | TB_TAIT032803_0001 | NA | NA | 8260B | NA | SM/CC |
| 3/28/03 | NA | FIELD BLANK | FB_TAIT032803_0001 | XMW_19 | NA | 8260B | STL | SM/CC |



Tait Environmental Management, Inc.

Engineering • Environmental • Compliance

Investigation Derived Waste (IDW) Inventory Record

| | |
|---|-----------------------------|
| Project Name: BRC, Former C-6 Facility (March 2003 Sampling) | Project No.: EM-2303 |
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| Accumulation Date | Drum/Bin | Identifier | Waste Origination | Contents | Container Location | Inventoried By | Labeled By |
|-------------------|----------|--------------|-------------------|--------------|--------------------|----------------|------------|
| 3/25/03 | Drum | C6-IDW175-TA | WCC-5S | Ground Water | Lot 8 | NC/CC | NC |
| 3/25/03 | Drum | C6-IDW176-TA | WCC-6S | Ground Water | Lot 8 | NC/CC | NC |
| 3/25/03 | Drum | C6-IDW177-TA | TMW-10 | Ground Water | Lot 8 | NC/CC | NC |
| 3/25/03 | Drum | C6-IDW178-TA | TMW-11 | Ground Water | Lot 8 | NC/CC | NC |
| 3/25/03 | Drum | C6-IDW179-TA | TMW-14 | Ground Water | Lot 8 | NC/CC | NC |
| 3/25/03 | Drum | C6-IDW180-TA | TMW-15 | Ground Water | Lot 8 | NC/CC | NC |
| 3/25/03 | Drum | C6-IDW181-TA | WCC-9S | Ground Water | Lot 8 | NC/CC | NC |
| 3/26/03 | Drum | C6-IDW182-TA | TMW-6 | Ground Water | Lot 8 | NC/CC | NC |
| 3/26/03 | Drum | C6-IDW183-TA | TMW-9 | Ground Water | Lot 8 | NC/CC | NC |
| 3/27/03 | Drum | C6-IDW184-TA | BL-03 | Ground Water | Lot 8 | NC/CC | NC |
| 3/27/03 | Drum | C6-IDW185-TA | WCC-3S | Ground Water | Lot 8 | SM/CC | CC |
| 3/27/03 | Drum | C6-IDW186-TA | TMW-1 | Ground Water | Lot 8 | SM/CC | CC |
| 3/27/03 | Drum | C6-IDW187-TA | TMW-4 | Ground Water | Lot 8 | SM/CC | SM |
| 3/27/03 | Drum | C6-IDW188-TA | TMW-7 | Ground Water | Lot 8 | SM/CC | CC |
| 3/28/03 | Drum | C6-IDW189-TA | XMW-19 | Ground Water | Lot 8 | SM/CC | SM |
| 3/28/03 | Drum | C6-IDW190-TA | TMW-8 | Ground Water | Lot 8 | SM/CC | SM |
| 3/28/03 | Drum | C6-IDW191-TA | TMW-2 | Ground Water | Lot 8 | SM/CC | SM |
| 3/28/03 | Drum | C6-IDW192-TA | TMW-5 | Ground Water | Lot 8 | SM/CC | SM |
| 3/28/03 | Drum | C6-IDW193-TA | DAC-P1 | Ground Water | Lot 8 | SM/CC | SM |
| 3/28/03 | Drum | C6-IDW194-TA | WCC-7S | Ground Water | Lot 8 | SM/CC | SM |